



Draft II: The University of Toronto in 1975 — a proposed submission to the Committee on University Affairs, December, 1968

Draft II; a memorandum prepared by the President and his staff for the Committee on University Affairs at their request:

In response to the letter that the Secretary of the Committee on University Affairs sent to Dr. Bissell on July 4th, 1968, we give herein an outline of the plans of the University of Toronto for 1975, indicating the basis on which they are established and how we see them to be related to total provincial requirements.

In general, it is trite to say, our chief goal is excellence in education. More specifically, it is to deploy our own particular congeries of human and physical resources so as to involve young people in the unending search for knowledge and wisdom and self-fulfilment. More specifically still, it is to offer undergraduate and graduate programs of the highest quality we can attain, to as large a number of students as we can properly expect to profit from the experience.

We intend to meet, by 1970, the undertaking that we gave in 1962 to enrol approximately 16,000 undergraduates and 5,000 graduate students on the main campus and to establish and foster two colleges in the metropolitan area. We also intend to fulfil our subsequent undertakings to increase the annual class size in the Faculty of Medicine by the equivalent of a new medical school and to develop an expansion of graduate work in Dentistry. Between 1970 and 1975 we hope to hold the line in undergraduate numbers and to taper off the increase of graduate degree and diploma students so as to reach a plateau by 1975. Our objective is to consolidate, improve, and intensify our work in those areas where it is particularly good and particularly necessary.

In what follows we describe the goals of the five largest divisions of the University and their implications for our capital development. We mention the smaller divisions, and the considerations that impinge on central planning, and we note the needs and priorities that seem to us to carry the greatest urgency for our continuing successful operation. Statistical material including enrolment projections, new or expanded programs, and the extent and anticipated cost of further physical facilities, is appended.

(1) The Faculty of Arts and Science

Eighteen months' intensive study of the recommendations of the Macpherson Report will bear fruit in new first and second year programs in Arts and Science, beginning in September, 1969. The incoming student will be offered the choice of any five courses in the entire spectrum covered by the Faculty, his choice having two necessary limitations. The first would be his familiarity with the subject (he could not, for instance, choose a non-beginners' course in French if he had never studied French before). The second would be the availability of sufficient instructors in the popular subjects. Apart from these limitations, the entering student will be able to concentrate in one field of special interest (as the applicant for Honour Classics can do at present), or to choose a grouping of closely related subjects (as in Social and Philosophical Studies now), or to sample completely disparate fields. And, whatever his choice, he will not be locking himself into, or out of, future specialization or future generalization. In the second year, specialist programs will be identified which bear a relation to the existing honour courses, but are much less rigidly structured; by his choice of those courses a student may identify

The Executive Committee of the Board of Governors and the President's Council have agreed to the publication of Draft II of the proposed submission to the Committee on University Affairs with the deletion of the schedules of estimated dollar amounts and proposed phasing of the costs of buildings. The Committee on University Affairs has expressed its approval of this procedure.

In the forecast of construction, the code letters and numbers were inserted for easy reference and do not indicate priorities.

CLAUDE BISSELL
President

himself with such a program, but he will be under no compulsion to do so.

This is the most fundamental change in structure that the Faculty of Arts and Science has ever seen. It is hoped to preserve thereby the values of serious concentrated coherent studies that have made our undergraduate honours work a source of justifiable pride, and at the same time to remove the rigidity that has become endemic in those courses and to rectify the second-class citizenship of the generalist student. We expect that the experience of some first-year students in a number of disciplines will produce a demand for many more courses on an interdisciplinary basis. The resources of our departments are well adapted to the production of courses on, e.g., the Renaissance, or Environmental Studies, that will enrich the experience of those students who deliberately choose the generalist approach. It will be possible for departments to offer work that is better suited to the changing patterns in the elementary and secondary school preparation of our students; and those who come to us from Colleges of Applied Arts and Technology will be more successfully absorbed in a system that places less reliance upon prerequisites and sequences.

At the same time, we are fully aware of the dangers of the cafeteria-style approach, and realize the immediate need for greatly increasing the opportunities for students to find out what is involved in their choices so as to establish a coherent pattern in their studies. We are fortunate to have, in the Colleges, a great many experienced persons who combine academic knowledgeability with personal interest and insight; additionally, every department will need to give more time to this counselling activity.

The numbers enrolled in the Faculty during the last two years have crept above the authorized limitation for the St. George campus; these will be cut back to a total of 8,600. The Faculty is working out a registration procedure which also recognizes limitations on enrolment in certain areas. We have a fairly good idea of what subjects will be the most popular. While striving as much as possible to meet the interests of the individual student, we must impose a cutoff when the teaching capacity of a department is reached. With more student initiative in seeking information about a great variety of fields of study, and with the opportunity of sampling without necessarily buying a whole honour course package, we expect that some of the less familiar areas will attract greater interest than they do now.

The other main emphasis in the Macpherson Report is, of course, the alteration of the teaching process in the direction of more reliance on small group work, along with larger and fewer lectures. Here, each department is assessing

its problems and will move in that direction within its present resources to the degree that the nature of the discipline permits it to do so. Experience will show both staff and students whether the new direction is more satisfactory or not.

Admittedly it is less than ideal to begin the implementation of the Macpherson Report within the present restraints of staff, space and financial resources. The individual departments have, however, accepted the position that we must begin within the resources currently at our disposal, and are aware that the result will be a compromise between our present practice and the best interpretation of the Macpherson Report ideals. We do not intend to hire new staff merely to implement the new program; new staff will continue to be chosen carefully with due regard for both the undergraduate and the graduate needs. Many other expedients will suggest themselves such as the greater use of senior graduate students, the exploitation of teaching aids of many kinds, and the encouragement of experimental programs of self-directed study. We shall strive to increase our staff gradually, particularly in the most popular areas, in order to come closer to the desirable teaching situation in each department. Having seen, and understood, the profound dissatisfaction of thoughtful students with the processes of their education, this new program is our answer. If there were to be no improvement factor in the provision of our resources, the answer would be only an irritant. But we are sure that improvement is one of the Province's goals as well as being one of our own.

With regard to space, we shall make better use of what we have. Work is in progress on a computer-aided time-table for the Faculty, embodying a lengthening of the teaching day if necessary, and this will eventually be phased in with an integrated university-wide time-table. Many of the departments inhabit ancient buildings that must have money spent on them in any case to keep them from falling down; as these essential renovations are made, more efficient arrangements of the space can be simultaneously achieved.

New space for many faculty offices and some general purpose instructional space will become available to the Faculty in the new Library and Innis College. This will not, however, be suitable for the use of the seriously cramped departments such as Botany, or for the increase of computer services. We hope that by 1973-74 a beginning may be made on the provision of heavy-duty space for these purposes. By 1975-76 we hope to see the prospect of more space for non-laboratory departments, so that the sociologists, the anthropologists and the artists may leave the old dairy on Spadina Crescent and the philosophers

may remove their unwanted presence from the administration building on Huron Street. Our Chinese scholars are presently parked in the Borden Garage. Islamic Studies was moved last summer to the Tip Top Tailor building at Spadina and College, arriving, by an embarrassing coincidence, at the time of the Arab-Israeli war.

The goal of the Faculty of Arts and Science, then, is to consolidate and revitalize its undergraduate teaching, which is at the core of the University. It was arrived at through the investigation that resulted in the Macpherson Report, the study of that Report by staff and students (separately and together), the recent open meetings of the Faculty Council, and, most of all, by the self-appraisal and concern for reform of all parts of the Faculty. In relation to the rest of the Province, the Faculty has for some years offered work in several fields (East Asian, Italian, Islamic, Near Eastern Studies) that are not covered elsewhere. It will broaden its coverage of these areas as staff become available and opportunity permits. In Arts and Science generally the demand throughout the Province is heavy; but there is great potential for growth at Scarborough and Erindale, and at York University, and it is our belief that on the main campus we should think not of expansion but of improvement and experimentation.

(2) The Faculty of Medicine

The Medical curriculum has been under continuous study from the time that the University agreed to increase its class size by 75 additional students and began the planning of its new Medical Sciences Building.

The staff and students involved in curriculum planning recognized that a four-year program cannot convey to the students all current medical knowledge and skills and that, moreover, such knowledge will continue to expand rapidly. They realized that medicine will have increasingly intimate and complex relationships with the community, and that the medical curriculum must be continually reviewed to keep it abreast of changes in the characteristics of incoming students, the state of scientific knowledge and the needs of society. They sought, accordingly, to evolve a curriculum which is an integrated unit, presenting an orderly progression of relevant information and skills; which emphasizes the interdependence of the biological, behavioural, and clinical sciences; and which recognizes the individual interests of students and the choices of future careers in medicine.

The new curriculum is based on systems, rather than on the conventional departmental divisions, and it is based on three interrelated periods of study: I, Normal biology of man; II, Disease in terms of altered human biology; and III, Patients in relation to altered biological processes. The first period covers the sciences basic to Medicine, including behavioural science. The second will be divided between didactic and laboratory work and work in hospital wards; ultimately a great deal of the instruction will be done in the teaching hospitals, but until they acquire the necessary facilities it will have to be based on campus. There will be more scope for the students to follow their individual interests through a wider range of elective subjects. The third period will be a clinical clerkship, approximating, but improving on, the present system of rotating internships. Students are still required to complete a full year of postgraduate training

(See page 2, col. 1)

Draft II: The University of Toronto in 1975

(Continued from page 1)

before being licensed, but after the clinical clerkship they may proceed directly into their specialty instead of doing a rotating internship.

The achievement of a less structured curriculum in a very demanding professional course is in accord with the new student emphasis on the goals of education and the claims of personal commitment.

In quantitative terms, the primary task assumed by the Faculty in 1964 was to increase the class size in the medical years from 175 to 250. The Faculty proposes to increase the 1st Medical Year to 200 in 1970-71 and to 225 thereafter. 25 students from the course in Biological and Medical Sciences (or whatever approximates that course in the future arrangements of the Faculty of Arts and Science) will be admitted annually to the 2nd Medical Year. The total numbers in the four medical years will stabilize in 1974-75 at approximately 938. The two Premedical years will total 258, as now. The total in diploma and sessional courses, Residents, Fellows, and Junior Interns, is expected to rise from the current 905 to stabilize at 1,000. Speech Pathology, Physical and Occupational Therapy, etc., will go to 367, making a total full-time enrolment in the Faculty (apart from those in the School of Graduate Studies) of 2,563. This goal was reached in close consultation with the Government and the deans of the other Ontario medical schools.

With regard to space, the Medical Sciences Building was planned with the new curriculum and the new enrolment in mind. The only other implication of this program for our capital needs is that some renovations will need to be done in the lower floors of the Best Institute (R1), in order to provide small teaching labs by 1969-70 for the teaching of students in Part 2 of the new program. In the original plans for the Medical Sciences Building provision was made for this teaching, but subsequently it was decided that this teaching should be done in the teaching hospitals, and one whole floor was deleted. The expected facilities in the hospitals are not yet available, and probably will not be fully available for seven or eight years. The renovation of the Anatomy Building will also need to be completed (R6).

The Faculty's objective of a full-time staff of over 500 by 1969-70 will not be met; each year for the last three or four years the increases have fallen below the level the Faculty considered desirable. The Faculty is now asking for an increase of \$3,025,000 over and above the special grant of \$1,950,000 that was awarded for the current year. This would provide another 154 full-time members of staff, and supporting non-academic staff. They point out that even this amount would leave them below the level desired for 1969-70, when the new curriculum comes into effect, the teaching year is lengthened, and enrolment increased.

For the past two years a grant of \$600,000 has permitted the addition of staff to Sunnybrook Hospital. For the next academic session, 1969-70, a grant of \$630,000 is requested. The reason no greater increase is required is that the staff is predominantly clinical, engaged in practice, and fees earned are the major support of salaries and fringe benefits.

(3) The Faculty of Dentistry

The Dental curriculum has been under systematic study for a year and a half, but there is as yet no firm indication of the kind of changes that will be recommended.

During the current year, the beginning of the expansion of graduate programs is taking place, financed by the special grant of \$175,000 received for this purpose. The Faculty intended to add 8 additional staff for the graduate program in 1969-70, but they have reduced this to 6 at the request of the Department of University Affairs.

The Faculty is requesting a special grant of \$353,000 for the support of this program in 1969-70.

The necessary addition of 50,000 square feet will be effected, we hope, during 1971-72 and 1972-73 (NA 8).

(4) The Faculty of Applied Science and Engineering

In 1967 this Faculty produced a plan for its future which envisaged an ultimate enrolment of 3,000 undergraduates and 1,000 graduate students, to be reached in 1974. However, in view of the facilities for undergraduate engineering in other universities in the Province and the need for several of the existing engineering schools to grow, our Faculty has reduced its terminal undergraduate enrolment goal to 2,500.

The report pointed out that there had been major changes in the character and scope of engineering education and research. "The tempo and sweep of change in the world of science, engineering and technology, which is so profoundly affecting the relation of man to man and man to his environment, demands that we be increasingly concerned with scientific and operational principles rather than with established techniques and skills cast in traditional moulds. And the steadily increasing sophistication of physical means calls for an informing sensitivity to purposes." It went on to suggest that the integrity of engineering lies in a purposeful and judicious employment of both scientific and operational principles, and it forecast a much greater involvement of the Faculty with interdisciplinary centres and institutes.

The Faculty was the original sponsor of the Institute of Aerophysics and, with Medicine, of the Institute of Biomedical Electronics. It has long associations with Computer Science and the Centre for Culture and Technology; it is taking part in the Centre for Urban and Regional Studies (with Architecture and others), the Institute of Quantitative Analysis (with social scientists and others), and works with Astronomy on the joint research program in radioastronomy. It is now playing a leading role in the establishment of a graduate program in Environmental Studies. Many approaches are taken to this subject: ours will be appropriate to the resources we can already command. Besides the engineers' long-standing interest in the effects of industrial processes, the physicists' work in such fields as atmospheric physics, earth physics and meteorology, and the biologists' plant and animal ecology, the School of Hygiene is ready to contribute to the instructional program its expertise in environmental health and life sciences (medical bacteriology, microbial chemistry and genetics, etc.), and in the very important social science aspect of the subject, the Faculty of Law and our strong departments of Political Economy and Sociology are actively interested. Altogether we can call upon the facilities of nineteen participating departmental and other units—facilities geared towards the pure and basic elements of research which collectively support the mission-oriented work. This is an excellent example of how a massive concentration on pressing local problems can be combined with an expansion of fundamental research.

The Environmental Studies program will involve, initially, the renovation of the Mill Building (R4). We propose to add two stories to the Metallurgy Building (NA6), partly for a Materials Research Centre which has been assured of Federal Government support as a "centre of excellence" in Canada. The Wallberg renovation (R2) should be completed for the long-planned shift of Engineering into the east half of the building; the University's development plan of 1957, which preceded the additional commitments undertaken in 1962, provided for Engineering to take over all the Wallberg Building when Chemistry moved west, and to take over the old Physics (Sandford Fleming) Building when Physics moved west. The Mining Building was to be renovated for Geology.

We have had second thoughts about the Sandford Fleming and Mining Buildings, because the renovations that would now be necessary to convert them to modern facilities would cost as much as building entirely new space. It would be much more satisfactory in the long run to use the prime site where the Mining Building now stands for a multi-purpose high-rise structure (as an eminent Engineering graduate of ours has suggested)

and to use Sandford Fleming for administrative purposes requiring only minor renovation. The major difficulty in implementing this scheme would be the matter of staging. The present occupants of the Mining Building (Geography, Geology, Botany overflow) must have somewhere to go, and they require highly-serviced space. To re-house them in any temporary quarters would be prohibitively wasteful.

The solution we favour would be to re-house them in permanent heavy-duty space on the West Campus, along with Computer Science which is desperately cramped in Sandford Fleming and to provide for some Engineering departments the space that they urgently require which would be lost to them as a consequence of not renovating Sandford Fleming. Then we would be able to replace the Mining Building with a tower that could be serviced for heavy-duty use on the lower floors, with light-duty space above; it would take care of the remaining part of our graduate expansion in the laboratory-based disciplines and of the growth that we foresee in interdisciplinary teaching and research. We visualize multi-faculty use of such a building. Besides the economies that a large building would produce, the concept fits in with the expressed desire of Engineering to make its future advances in close association with other parts of the University and its willingness to sacrifice departmental identities in the interest of new and co-ordinated approaches.

It will be clear from the discussion above that, while the desirability of Engineering expansion at the graduate level is recognized, the actual numbers suggested by the Faculty must be considered tentative, to be looked at in the context of the entire future shape and emphasis in the School of Graduate Studies.

(5) The School of Graduate Studies

This year, for the first time, enrolment in the most populous graduate departments was severely limited. This limitation, which was based on staff and space capacity, marks the beginning of a period of controlled containment looking towards a steady state in 1975.

There has been much discussion of the final shape and character of the School, and although there is not yet a firm blue-print the general lines are becoming clearer. There is, first, agreement with the principle of the division of labour among the Ontario schools which means the avoidance as far as is academically healthy of what is redundant or repetitive. There is agreement that we should build on the strength we have. But there has been a tendency to think, perhaps unconsciously, in terms of isolated centres of distinction. Now the idea is gaining ground that we should think instead of a *bonded* set of centres of distinction, making cross-contributions to one another through the interdisciplinary areas.

At this University the Institutes of Aerospace Studies and Computer Science (which have long since attained full departmental recognition) date from 1949. Between 1960 and the present, 16 interdepartmental centres and institutes have been established. The very great student interest in interdisciplinary approaches indicates that we may expect much of our growth to be in these "bonding" areas. For example, the Centre for Mediaeval Studies, now in its sixth year, has 39 Ph.D. students and 21 M.A. students; the Centre for the Study of Drama, in its fourth year, has 18 Ph.D. and 27 M.A. candidates; the Centre for Linguistics, in its second year, 10 Ph.D. and 19 M.A.; and the Institute for Medical Sciences, which only received Senate approval this fall, has 7 Ph.D. and 7 M.Sc. students. (All these numbers refer to full-time students only.) This degree of interest is an indication of the reshaping that is to come.

It is, moreover, *Canadian* student interest that is determining the future shape of the Graduate School. All graduate schools feel pressures from abroad. We believe that it is right to enrol some students from foreign countries, including the less developed countries in Africa and Asia, as part of a university's international responsibility. But we believe that there is a concomitant responsibility

to be very selective in the choice of students whose backgrounds are likely to make it difficult for them to succeed in our programs, and to make sure that they form a digestible minority in a School whose Canadian flavour is manifest. The admission of foreign students in overwhelming numbers into some graduate schools leads to the suspicion that the growth of those schools is being dictated more by faculty ambition than by genuine service to society. At the present time it is estimated that about 50% of the graduate students in Canadian universities are foreign students. We have in the School of Graduate Studies an enrolment that is 70% Canadian, 20% American, 4% European, and 6% from other foreign countries.

The life sciences are attracting the most rapid growth in student interest. For this development we are well served in the new Medical Sciences Building, but the strangled situation of Botany will produce a lop-sided emphasis until there is more space for that department. The social sciences continue to be very attractive to students; here, our growth is shared by many other universities and our aim must be to emphasize the approaches that are characteristic of this University. The humanities, where we already have our largest numbers, are probably not very far from stability in over-all size, and the effort there will be for intensification rather than enlargement: a greater proportionate Ph.D. enrolment, and an emphasis on new combinations to exploit the superb resources we have in the language and literature departments. In the physical sciences and engineering we anticipate a marked slow-down in the rate of growth in the immediate future; the only new direction that is being emphasized is the area of Environmental Studies.

For the longer term, however, we should be prepared to develop and to exploit rapidly new combinations of the experimental sciences and technology in the solution of problems that are increasingly impinging on human society—problems that bid fair to monopolize our qualified manpower within a decade or less. These are environmental problems in the broadest sense of the word—the natural heritage, the cleansing and renewing of air and land and water, the urban environment, housing, transportation, communications, physical and mental health in social as well as in individual terms. We believe that this University's contribution will be largely in research and in high-level training, it will be interdisciplinary, and it will be massive.

The Humanities and Social Sciences Research Library will provide for us and all Ontario universities the support for these areas of study that has been greatly needed, and it will stand as a great symbol of the preeminence of humane, societal, regenerative values in this province and country. For the teaching activities of certain interdisciplinary centres, the communal life of graduate students and the administration of the Graduate School, we hope that an early start can be made on the Graduate Complex. Additional space for Botany and for computer instruction and services is needed in the near future, followed by more "light-duty" space for the non-laboratory disciplines. Before 1975 we should have also made a start on a massive provision of multi-faculty heavy-duty space for the developments we envisage will be urgently necessary in science and technology. The time is past in which to think of building architectural fragments that perpetuate intellectual fragmentation.

(6) Other Professional Schools

The planning for the other divisions of the University is not complete at the present time.

During the past six months a study of the various Divisions of *Health Sciences*, other than Medicine, has been undertaken by a firm of management consultants through assistance provided by a special grant from the Department of University Affairs. This study has been very successful, in that it has assisted in the clarification of objectives of each Division and has led to exploration

(See page 3, col. 1)

Draft II: The University of Toronto in 1975

(Continued from page 2)

tion of ways and means in which the various Divisions of Health Sciences might proceed towards coordination of undergraduate programs and graduate programs. The objective here is to reduce duplication, to improve communication between the various Health Science students and ultimately to produce a program of integrated effort to serve the community. While progress is relatively slow to date, there is much enthusiasm and general support for the objectives stated above.

An item for renovation of the Botany Building appears in our forecast of capital expenditures (R10) with the idea that when Botany moves to new accommodation their present building could house medically-oriented groups (which would be logical from its proximity to Medical Sciences and Hygiene).

The School of Social Work and the School of Business have been awaiting the space for which the City of Toronto donated an earmarked grant of \$2,400,000 to the National Fund. The project has been at a standstill because of the impossibility of getting a decision from the municipal authorities about the depressing or re-routing of vehicular traffic through the campus. We have commissioned a traffic study, jointly with the City of Toronto and Metro, in the hope of breaking that deadlock. Moreover, for the sake of an early decision on the matter of the Student Centre we are attempting to obtain consents that will facilitate the erection of that building without waiting for the results of the traffic study. We are reluctant to give up hope of the best solution—the closing of St. George Street from Bloor to College—being adopted. Until this or some other decision is taken, planning for that entire sector must be checked or arrested.

Social Work is particularly conscious of the acute need for trained personnel in the field of social welfare. There have been discussions of (a) giving undergraduate courses in Social Work, perhaps one or two years of "pre-social work", as well as graduate work, and (b) establishing an interdisciplinary centre for research in the social services. No decisions have been taken on the first of these proposals. Additional light-duty space for Social Work and Business is included in our capital forecast (NR4), in the hope that the difficulties with the city and Metro authorities will be ironed out.

The Faculty of Law has proposed a major expansion of its enrolment on the grounds that the need for lawyers in Ontario surpasses the entire present and predicted output of all the law schools in the Province. The proposal is to increase the existing limit of 450 to 675. No decision has been taken in this regard, and our enrolment projection reflects no such increase.

This problem is perhaps typical of those that confront this University in the process of levelling off. The need to graduate more lawyers to serve the expanding economy, the legal aid program and the complexities of government was well established, and the obligation to try to meet it appeared to be compelling, in the public interest. On the other hand, questions arise: are the other law schools really unable to handle the training of a great many more lawyers? Should there be more law schools in the Province? Is the profession too rigidly structured? Do all the needed personnel really require the long and expensive training presently prescribed for lawyers? Is the Bar Admission Course necessary? What about a recognized category of legal auxiliaries, "para-legal" personnel? Won't much of the searching for precedents and relevant cases be computerized before long? Is there a need for encapsuled legal courses for political scientists and social workers? Isn't the proper role of a university such as this to view the law as an intellectual discipline — to see it as a matter that is basic to the fabric of society and deserves a broad interdisciplinary approach?

The case of the Faculty for more staff and a better working library is well based even if there is no expansion of enrolment.

We have been unable to make a satisfactory provision for the continuation of the Institute of Child Study. The Institute's approach, and its way of organizing research, are said to be no longer useful, since long-term developmental research with a highly selective child population has been replaced by other approaches that have been found more fruitful. The Institute is, however, the only place of its kind in Canada and we felt that it would be irresponsible to eliminate it without trying to make sure that its research and training functions will be carried on under other auspices — assuming that there is need for investigation starting at the pre-school age and for teachers with special training for very young children.

We asked the Ontario Institute for Studies in Education if they were interested in operating the school as an adjunct to their longitudinal researches. The matter has apparently been referred to the Minister.

The Faculty of Forestry is one of three in English-speaking Canada, and its work is of great value: its graduates are in demand by government and industry and its research is basic to important problems of forest management and conservation. It has been bedevilled by restrictions of space, on the one hand, and pressures for greater production of graduates (3 or 4 times the number available) and greater involvement in the interdisciplinary approach to resource management on the other. The logic of the situation suggests that the Faculty

could operate in a more congenial environment, and could find room for the growth that appears to be completely justified, on one of our suburban campuses. The Faculty had explored various alternatives and has expressed enthusiasm for a move to Erindale College. A proposal is going before the Department of University Affairs to erect a simple light-duty structure which would be additional to the staged development plan to accommodate 3,000 students by 1975. This could meet Erindale's immediate emergency in 1969-70, and could provide classroom space for Forestry later.

(7) Central Considerations

As you will know, the University of Toronto has established a committee representative of the various groups in the University to consider changes in its internal structure so as to achieve an acceptable degree of participation in policy-making by all the groups who have a legitimate concern—staff, students, administration, and the public. There are many anomalies in a governing structure dating from 1906 and a federation agreement dating from 1887, which cannot be corrected until there is thorough study and discussion and legislative revision. We cannot say that the foregoing description of our goals is an authoritative pattern that has been agreed upon in every specific.

Planning takes place on many different levels. In a healthy institution, initiatives will arise from individual members of the staff and student body, from imaginative chairmen and deans, from concerned alumni, from experienced Board members, and from administrative leaders. The refining and reconciliation of these initiatives is a continuous process. This process will be better organized when we have a different governing structure; but the structure is less important than the initiatives.

The aims described above have for the most part been discussed in the President's Council, on which there are representatives of the staff, administration and Board. The Council has been useful in bringing these estates together at the policy level to advise the President. It is not, however, as fully representative of the academic community as we would like it to be. We have invited the students to be represented on the Council, but there is not yet agreement on the terms of their membership.

(8) Priorities in the Capital Program

Our list of capital projects for the St. George Campus is arranged as follows: Projects in progress; Renovations of academic buildings; Utilities and land; Student facilities; Parking garages; and New academic space.

Renovations: We are obliged to undertake periodic renovations of our buildings in order to keep them in use and to bring them into conformity with fire and safety regulations. This would have to be done even if we made no additions

to staff and took in no further students. The nature of these older buildings enables us to achieve economies in the provision of usable space at the same time that essential work is being done for preservation and safety. University College is a good example: parts of that historic building have been untouched for 100 years, and in the course of the renovation program which is planned to be completed in 1975-76 we shall reclaim basement and corridor areas that have not previously been usable for teaching purposes.

The Faculty of Applied Science and Engineering has been promised the space in the Sandford Fleming Laboratories previously occupied by the Department of Physics and now largely used by the Institute of Computer Science. As we have already explained, the renovation of this space for use by Engineering is so expensive that new space would probably be just as economical and more satisfactory. We have not included anything for renovation of the Mining Building because the replacement of that structure by a modern high-rise building would be a much more sensible use of our land and resources. The difficulty is that the present occupants of both those buildings have to have somewhere to work in the meantime. It is our hope that sufficient new heavy-duty space can be provided to re-house those occupants and relieve Engineering (NA5), that it will be possible to replace the Mining Building by a large structure for multiple use and dispense with the very large expenditure for renovating Sandford Fleming. Whether this can be done or not depends on the timing of the availability of funds; if the provision of new heavy-duty space must be delayed beyond the timing we suggest for NA5 (mainly 1972-73 and 1973-74), then we shall probably have no option but to proceed with piecemeal renovations.

There is urgency about the Best Institute renovation (R1) because as we said earlier, the teaching of Part 2 of the Medical curriculum which would ideally be done in the teaching hospitals will have to be done on campus until those hospitals obtain the necessary facilities to handle it. The Banting Institute renovation (R7) program has been temporarily halted because of the stringent demands of the Fire Marshal, but it should be picked up again, starting in 1971-72. Further work on the Wallberg is needed immediately for its occupancy by Engineering (R2). We have included an item for the Hygiene Building (R8) in the hope that this will be paid for by the Federal Government through the Health Resources Fund; we are told that there is a good possibility of obtaining this support because this is the only School of Hygiene in English-speaking Canada and the demand for additional graduates is very great. The Botany Building (R10), as explained earlier,

(See page 4, col. 1)

OFFICE OF STATISTICS AND RECORDS UNIVERSITY OF TORONTO

PROJECTION OF ENROLMENT FULL-TIME—ST. GEORGE CAMPUS SUMMARY BY FACULTIES

Revised November 13, 1968

FACULTY	1960 -61	1961 -62	1962 -63	1963 -64	1964 -65	1965 -66	1966 -67	1967 -68	1968 -69	1969 -70	1970 -71	1971 -72	1972 -73	1973 -74	1974 -75	1975 -76	1976 -77
Arts & Science*	5113	5629	6214	6939	7623	8131	8535	8717	9035	9030	8970	8780	8680	8680	8680	8680	8680
Applied Science & Eng.	1692	1486	1365	1487	1521	1616	1838	2063	2227	2381	2436	2422	2397	2397	2429	2504	2559
Architecture	214	214	226	231	248	252	248	263	270	274	284	284	289	289	294	294	294
Business									67	80	95	110	125	135	150	165	175
Child Study	13	17	16	10	14	15	24	16	35	35	35	35	35	35	35	35	35
Dentistry	420	509	580	595	603	615	616	624	632	634	639	659	669	679	689	689	689
Food Sciences				29	47	72	92	94	89	109	121	128	137	147	154	158	179
Forestry	97	103	111	100	102	89	111	138	178	205	205	205	205	205	205	205	205
Graduate Studies	1068	1065	1246	1489	1917	2381	2774	3308	3460	3950	4403	4628	4853	5078	5304	5468	5638
Hygiene	71	68	80	77	66	78	89	68	68	85	90	90	90	95	95	100	100
Law	131	161	193	267	327	383	408	422	407	417	417	417	417	417	417	417	417
Library Science	82	87	89	96	102	153	177	192	222	200	250	300	350	350	350	350	350
Medicine	1384	1487	1552	1570	1516	1548	1680	2122	2161	2225	2276	2334	2411	2523	2563	2563	2563
Music	132	139	169	165	184	215	212	266	335	378	401	430	442	449	453	453	453
Nursing	181	182	265	233	263	311	345	399	437	400	417	427	438	467	497	510	535
Pharmacy	377	393	416	395	386	407	426	460	486	515	510	510	510	510	510	510	510
Physical & Health Education	175	162	187	200	239	269	333	352	401	413	410	410	410	410	410	410	410
Social Work (Diploma)						2	3	9	6	5	7	7	7	7	8	8	10
Total:																	
Undergraduates	9543	10015	10820	11711	12531	13440	14295	14994	15685	15953	16048	15946	15937	15996	16098	16190	16291
Graduate Studies	1068	1065	1246	1489	1917	2381	2774	3308	3460	3950	4403	4628	4853	5078	5304	5468	5638
Other Postgraduate Courses	539	622	643	683	717	740	880	1275	1371	1433	1515	1602	1675	1799	1841	1861	1873
GRAND TOTAL	11150	11702	12709	13883	15165	16561	17949	19577	20516	21336	21966	22176	22465	22873	23243	23519	23802

NOTE: The figures do not include College of Education and graduate students in Educational Theory. Figures up to 1967-68 are Actual, from 1968-69 Projected. The 1968-69 projections are based on preliminary enrolment figures. Candidates for graduate degrees are shown in Graduate Studies; those in other postgraduate courses are included in the figures for the divisions (Medicine, Hygiene, Dentistry, etc.) where these courses are offered.
*Including Special Students.

Draft II: The University of Toronto in 1975

(Continued from page 3)

will be useful for medically-oriented groups in the future.

Utilities and land: Like renovations, the utilities program (UL1) has to be carried on irrespective of the addition of staff or students. We have suffered interruptions of services through the overloading of systems that have caused damaging expense especially for the computer operation. We are under continuing pressure from the City of Toronto Fire Department to undertake a program of fire safety improvement (UL3), and the Ontario Fire Marshal is insisting that all buildings in which renovations are carried out must be brought up to present-day fire safety codes. The roads that we are taking over from the City have to be either renewed, changed to pedestrian walkways and service roads, or closed, and there is an urgent need for improved lighting of the campus (UL5). The City is separating its sewer system into a storm system and a sanitary system, and the University will be required to deliver its storm and sanitary sewage to the separated city systems (UL6). There is great need for additional storage space both as a seasonal and as a long-term requirement; we are renting such space now, and it is thought that it could be economically provided at the Connaught farm at Bolton (UL8).

Amounts of land acquisition are included to complete the purchasing of the north-west corner of the campus (UL2) and for a high velocity tunnel required by Aerospace (UL4); the capital provision for the latter is considered to be the net settlement needed to acquire the additional land in conjunction with the conveyancing or leasing of the valley lands to the Conservation Authority for flood control purposes; they are essential to the Authority as a storage area above the High Finch Dam which is being constructed south of the Connaught site.

It is thought that by 1973-74 it will be necessary to do some renovation of Convocation Hall (UL7).

Student facilities: The first priority is Innis College, which has been without

any but the most primitive facilities for five years (STU1).

Ever since the University's expansion program began in 1957, we have given first priority to academic space and have left for later on the provision of facilities and amenities for the increased student population. We have therefore a very considerable backlog to make up. During the National Fund campaign we received funds earmarked for athletic facilities; we provided for the women students first because they had practically nothing, but we have left the men with the totally inadequate and antiquated space in the Athletic Wing of Hart House, built half a century ago for a town-size rather than a city-size enrolment. The Health Service and Infirmary have scarcely been enlarged at all; housing and food services are inadequate; the Student Centre, into whose planning generations of students have put great energy and devotion, does not exist. There are reasons for some of this inactivity, but the inadequacies add up to an appearance of almost total neglect, and it is to the credit of our students that they have been remarkably patient and understanding. Obviously their patience will not last forever. We want to make up this backlog of need and to give them a measure of decency in their living and working conditions. This, again, will have to be done whether we add another student or not.

Staff facilities: In many respects the situation of a large number of our staff, especially younger members of staff, is a source of concern. There is no university centre on this continent where housing is scarcer and more expensive than it is in Toronto. Young men who have joined us recently are having real difficulty in coping with current mortgage or rental rates in addition to the high costs of food and clothing. The suggestion has been made that the Cawthra Apartments—which we have had under consideration for some time in connection with student housing—might better be rented to junior members of staff in an attempt to alleviate the situation for them and give them a chance to look around before

investing in a more permanent establishment. There is no decision as yet on this policy, which would represent an innovation for this University; but there seems to be a strong likelihood of our having to get into this kind of activity in the near future, and the Cawthra building is suitable, and excellently located for the purpose.

We are proposing a new Faculty Club, which could be included with a much-needed addition to Simcoe Hall. The present Faculty Club has been too small for the size of our staff for several years. The whole purpose of a Faculty Club is defeated if it is not large enough to accommodate the staff. For some time it has been impossible to admit junior categories, and this is bad for morale.

New academic space: The various items have been discussed earlier and need not be recapitulated here. We would emphasize that this new academic space, along with the projects in progress, is the only category of space that should properly be related to additional students.

There are many considerations that make the capital needs of this University difficult to compare with any others. Toronto is the oldest university; it is in the centre of the most complex urban environment in the Province; and it has assumed the greatest responsibility for expansion at the highest levels. Any consideration of costs at the University of Toronto that does not give weight to these factors is invalid.

Forecast of Construction on St. George Campus to 1975

I Approved Projects under Construction

- PP1 Medical Sciences Building
- PP2 Humanities & Social Sciences Research Library
- PP3-Sundry Projects: Zoology, Physics, Utilities, Engineering Equipment, New College II, Sidney Smith Hall Air Conditioning, Centre for the Study of Drama and Health Sciences Survey

II: New Projects

Renovations:

- R 1 Best Institute
- R 2 Wallberg Building

- R 3 University College
- R 4 Mill Building
- R 5 Sandford Fleming Laboratories
- R 6 Anatomy Building
- R 7 Banting Institute
- R 8 Hygiene Building
- R 9 Economics Building
- R10 Botany Building

Utilities, Land and General Services

- UL1 Utilities Programme
- UL2 Land Acquisition
- UL3 Fire Safety Programme
- UL4 Aerospace Land
- UL5 Roads and Grounds Improvements
- UL6 Sewer Reinforcement Programme
- UL7 Convocation Hall Renovation
- UL8 Storage Building

Parking Garages (self-liquidating)

- PG1 Wellesley Street Parking Garage
- PG2 Medical Sciences Building Parking Garage
- PG3 Spadina Avenue Garages

Improved Student Facilities

- STU1 Innis College (Residence area)
- STU2 Student Centre
- STU3 Infirmary—158 St. George Street
- STU4 Women's Union Theatre Renovation
- STU5 Men's Athletic Building
- STU6 Graduate Union
- STU7 Health Service

Staff Facilities

- SF1 Simcoe Hall Addition and Faculty Club
- SF2 Cawthra Apartments

New Academic Facilities

- NA 1 Innis College (Non residence areas)
- NA 2 Graduate Complex—Academic Area
- NA 3 Graduate Complex—Administrative Area
- NA 4 Edmund Walker Hall
- NA 5 Multi-faculty, multi-use space, I
- NA 6 Metallurgy Building Addition
- NA 7 Animal Holding Unit
- NA 8 Dentistry Addition
- NA 9 Aerospace Academic Building & Tunnel
- NA10 Multi-faculty, multi-use space, II
- NA11 Law Building Addition
- NA12 Multi-faculty, multi-use space, III

seasonal music will be presented. Hart House Great Hall. 8.30 p.m. Tickets available from the Hall Porter.

9 MONDAY

Music

The Graduate Department of Music and School of Graduate Studies. "Bel Canto Comes To America". Prof. Charles Ham, School of Music, University of Illinois, Urbana. Room 116, Edward Johnson Building. 4.10 p.m.

10 TUESDAY

Lectures

Banting and Best Department of Medical Research. "The Actions of Insulin and Lipolytic Hormones on the Structure and Function of the Plasma Membrane". Dr. M. Rodbell, National Institute of Health. Room 417, Charles H. Best Institute. 3 p.m.

School of Graduate Studies and Centre for Medieval Studies. "The Missions of Augustine and Boniface". Edmund Colledge, O.S.A. Upper Library, Massey College. 4 p.m.

School of Graduate Studies and Department of English. "The Grecian Urn and the Chinese Vase". Prof. R. A. Foakes, professor of English, University of Kent at Canterbury, visiting professor of English, University of California, Santa Barbara. Rhodes Room, Trinity College. 8 p.m.

United Nations Lecture Series on "Sources of Strife and Violence in Today's World". "Religion—A Cause or a Remedy of Strife". Rev. Roland de Courmeille, Director of Jewish-Christian Dialogue program. Scarborough College. 8 p.m.

Colloquium

Department of Mathematics. "Reduced Products and Saturated Structures". Prof. Philip Olin, Cornell University. Room 2102, Sidney Smith Hall. 4.10 p.m.

Film

French Department, U.C. *Bientôt Noël*, the activity on Christmas Eve in Montreal, *Fantaisie de Noël*, Christmas fairyland across Canada and *Caprice de Noël*, three Christmas stories with a modern ending. Repeated Wednesday. Room 104, U.C. 1.10 p.m.

11 WEDNESDAY

Lectures

Institute for the History and Philosophy of Science and Technology. "Newton and God—The Clarke-Leibniz Controversy". Prof. F. E. L. Priestley. Room 102, McLennan Physical Laboratories. 1.10 p.m.

"Some Founders of Geology" series by Dr. W. E. Swinton. "Sir Andrew Ramsay (1814-1891)". Room 2117, Sidney Smith Hall. 4 p.m.

School of Graduate Studies and Department of History. "Slavery in the Americas in World Perspective". Prof. Eugene Genovese, Sir George Williams University, Montreal. Room 203, McLennan Physical Laboratories. 4 p.m.

Lecture

School of Graduate Studies and Centre for Medieval Studies. "The Emergence of 'the People of God'". Edmund Colledge, O.S.A. Upper Library, Massey College. 4 p.m.

School of Graduate Studies and Graduate Department of Classical Studies. "New Papyrus Texts". Prof. E. G. Turner, Professor of Papyrology, University of London and Member of the Institute for Advanced Study in Princeton. Room 24, Trinity College. 4.30 p.m.

COMING EVENTS

DECEMBER

5 THURSDAY

Public Meeting

Presidential Committee on Disciplinary Procedures. Innis College Lounge. 4 p.m.

Lecture

Department of Italian and Hispanic Studies and the Latin-American Studies Program. "Psychological and Material contributions of the Negro to Colombian Culture". Manuel Zapata Olivella, first holder of the Latin-American in Residence Chair, U of T. Room 1087, Sidney Smith Hall. 4 p.m.

Colloquium

Department of Physics. "The Electronic Properties of Organic Crystal Semiconductors". Dr. W. G. Schneider, president, National Research Council of Canada. Room 102, McLennan Physical Laboratories. 4.10 p.m.

Poetry Reading

Hart House Art Gallery. Prof. R. M. H. Shepherd reads a selection of Classical Greek poetry. 1.15 p.m. Ladies welcome.

Music

Faculty of Music. Thursday Afternoon Series. Ensembles. Concert Hall, Edward Johnson Building. 2 p.m.

6 FRIDAY

Seminars

School of Graduate Studies and School of Hygiene. "Transformations of Pneumococci". Dr. Alexander Tomasz, Associate Professor, Laboratory of Genetics, The Rockefeller University, New York. Room 235, School of Hygiene. 1 p.m.

Institute for Aerospace Studies. "New Aspects on the Statistical Evaluation of Test Data". Prof. W. Weibull, Sweden. Main Lecture Room. 2 p.m.

Colloquium

Department of Mathematics. "On Pseudo-Differential Operators". Prof. K. O. Friedrichs, New York University. Room 2102, Sidney Smith Hall. 4.10 p.m.

Public Reading

"Fiction in Progress", presented by novelists Jack Ludwig, Mordecai Richler and Brian Moore. Cody Hall, School of Nursing. 8.30 p.m. Admission free.

Athletics

Hockey. Windsor at Varsity Arena. 8 p.m.

7 SATURDAY

Open House

Annual Open House of the Engineering Society, Faculty of Applied Science and Engineering. Demonstrations, lectures, films and television presentations. Refreshments in all buildings. 2 to 5 p.m.

Lecture

Royal Canadian Institute. "Hunting Fossils for the Royal Ontario Museum". Dr. A. Gordon Edmund, Curator of Vertebrate Palaeontology, ROM. Convocation Hall. 8.15 p.m.

8 SUNDAY

Music

C.B.C. Concert. Festival Singers. Conductor: Elmer Iseler. Scarborough College. 3.45 p.m. Admission free.

A concert featuring the Catherine Palmer Singers. Selections of